

[(30)] for integrating the current of the component so as to average the variations in this current over time.

3. (Amended) A device according to Claim 1, [characterised in that the] wherein said means for modifying the current consumption comprises at least one random signal generator [(28)] and an array of resistors [(20)], the power supply to each of the resistors being controlled by the random signals.

4. (Amended) A device according to Claim 1, [characterised in that it comprises] comprising a plurality of means [(20, 20₁, 30, 30₁)] for modifying the current consumption.

5. (Amended) A device according to Claim 1, [characterised in that the] wherein said component comprises an EEPROM memory, and said means for modifying the current consumption of the component [in the case of a memory (14) of the EEPROM type, consists in simultaneously performing:

-] performs an operation of writing to or erasing the memory [(14), referred to as a hiding operation, and

-] simultaneous with an operation of [the] a microprocessor in said smart card.

6. (Amended) A device according to Claim 5, [characterised in that, in order to implement a hiding writing operation, the memory (14) comprises a part (26)] wherein a portion of said memory is dedicated to the recording of a random data item.

7. (Amended) A device according to [one of Claims 1 to 5, characterised in that] claim 1 wherein the activation of the means of modifying the current consumption is controlled by [the] a microprocessor [(12)] so as to be activated solely for the operations to be protected.

8. (Amended) A device according to Claim 5, [characterised in that the] wherein said microprocessor [(12)] performs [at least the] a cryptographic calculation according to the following steps:

- starting of [the] a charge pump,
- presentation of a random data item on [the] a data bus,
- presentation of a writing address on [the] an address bus,
- initiation of [the] programming,
- performing the cryptographic calculation,
- stopping the programming, and
- stopping the charge pump,

so as to mask the footprint of the current consumption occasioned by [the] said cryptographic calculation.

9. (Amended) A method for hiding [the] operations performed by a component, [characterised in that it includes] comprising the following steps:

- starting of [the] a charge pump,
- presentation of a random data item on [the] a data bus,
- presentation of a writing address on [the] an address bus,
- initiation of [the] programming,
- performing [the] a cryptographic calculation,
- stopping the programming, and
- stopping the charge pump.

REMARKS

Entry of the foregoing amendments is respectfully requested. These amendments are intended to eliminate the multiple dependency of the claims.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: _____

James A. LaBarre
Registration No. 28,632

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

Date: